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Application Number

07/715272

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(12) **United States Patent**  
Carter et al.

(10) Patent No.: **US 6,407,213 B1**  
(45) Date of Patent: **Jun. 18, 2002**

(54) **METHOD FOR MAKING HUMANIZED ANTIBODIES**

(75) Inventors: **Paul J. Carter; Leonard G. Presta,**  
both of San Francisco, CA (US)

(73) Assignee: **Genentech, Inc.,** South San Francisco,  
CA (US)

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **08/146,206**

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(2), (4) Date: **Nov. 17, 1993**

#### Related U.S. Application Data

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Jun. 14, 1991, now abandoned.

(51) Int. Cl.<sup>7</sup> ..... **C07K 16/00**

(52) U.S. Cl. .... **530/387.3; 435/69.6; 435/69.7;**  
**435/70.21; 435/91; 536/23.53; 424/133.1**

(58) Field of Search ..... **435/69.6, 69.7,**  
**435/70.21, 91, 172.2, 240.1, 240.27, 252.3,**  
**320.1, 328; 536/23.53; 424/133.1; 530/387.3**

(56) **References Cited**

#### U.S. PATENT DOCUMENTS

4,816,567 A	3/1989	Cabilly et al.	
4,845,198 A	7/1989	Urdal et al.	530/388.22
5,132,405 A	7/1992	Huston et al.	530/387.3
5,225,539 A	7/1993	Winter	530/389.3
5,530,101 A	6/1996	Queen et al.	530/387.3
5,558,864 A	9/1996	Bendig et al.	424/133.1
5,585,089 A	12/1996	Queen et al.	424/133.1
5,677,171 A	10/1997	Hudziak et al.	435/7.23
5,693,762 A *	12/1997	Queen et al.	530/387.2
5,714,350 A	2/1998	Co et al.	435/69.6
5,772,997 A	6/1998	Hudziak et al.	424/130.1
5,821,337 A	10/1998	Carter et al.	530/387.3
5,834,598 A	11/1998	Lowman et al.	530/399
5,859,205 A	1/1999	Adair et al.	530/387.3

#### FOREIGN PATENT DOCUMENTS

AU	85058/91	3/1992	..... C07K/15/12
EP	120694	10/1984	
EP	125023 A1	11/1984	
EP	0 239 400 *	9/1987	..... C12N/15/00
EP	323806 A1	7/1989	
EP	328404 A1	8/1989	..... A61K/39/395
EP	338745 A1	10/1989	
EP	365209 A2	4/1990	
EP	365997 A2	5/1990	
EP	368684	5/1990	
EP	403156 A1	12/1990	
EP	438310 A2	7/1991	
EP	438312 A2	7/1991	
EP	440351 A2	8/1991	
EP	0 460 167 B1	12/1991	
EP	0 519 596 A1	12/1992	

EP	0 592 106 A1	4/1994	
EP	0 620 276	10/1994	
EP	682040 A1	11/1995	
EP	451216 B1	1/1996	..... C12P/21/08
EP	432249 B1	9/1996	
GB	2 188941	10/1987	
WO	WO 87/02671	5/1987	
WO	WO 88/09344	12/1988	
WO	WO 89/01783	3/1989	
WO	WO 89/06692	7/1989	
WO	WO 89/09622	10/1989	
WO	WO 90/07861	7/1990	
WO	90/07861 *	7/1990	..... C12P/21/00
WO	WO 91/07492	5/1991	
WO	WO 91/07500	5/1991	
WO	WO 91/09966	7/1991	..... C12P/21/08
WO	WO 91/09968	7/1991	..... C12P/21/08
WO	WO 91/09967	11/1991	
WO	WO 92/01047	1/1992	
WO	WO 92/04380	3/1992	
WO	WO 92/04381	3/1992	
WO	WO 92/05274	4/1992	
WO	WO 92/11383	7/1992	
WO	WO 92/11018	9/1992	..... A61K/35/14
WO	WO 92/15683	9/1992	
WO	WO 92/16562	10/1992	
WO	WO 92/22653	12/1992	
WO	WO 93/02191	2/1993	
WO	94/11509	5/1994	
WO	WO 94/12214	6/1994	

#### OTHER PUBLICATIONS

Riechmann et al. [Nature 332:323-327 (1988)].\*

Queen et al. [Proc. Natl. Acad. Sci. 86:10029-10033 (1989)].\*

Roitt [Immunology, published 1985, by Gower Medical Publishing Ltd. (London, England) p. 5.5].\*

Tramontano et al. [J. Mol. Biol. 215:175-182 (1990)].\*

"Biosym Technologies" in New Products, Chemical Design Automation 3 (Dec. 1988).

"Polygen Corporation" in New Products, Chemical Design Automation 3 (Nov. 1988).

Adair et al., "Humanization of the murine anti-human CD3 monoclonal antibody OKT3" *Hum. Antibod. Hybridomas* 5:41-47 (1994).

Chothia et al., "Principles of protein-protein recognition" *Nature* 256:705-708 (1975).

Chothia et al., "Transmission of conformational change in insulin" *Nature* 302:500-505 (1983).

Corti et al., "Idiotope Determining Regions of a Mouse Monoclonal Antibody and Its Humanized Versions" *J. Mol. Biol.* 235:53-60 (1994).

(List continued on next page.)

Primary Examiner—Anthony C. Caputa  
Assistant Examiner—Minh-Tam Davis  
(74) Attorney, Agent, or Firm—Wendy M. Lee

(57) **ABSTRACT**

Variant immunoglobulins, particularly humanized antibody polypeptides are provided, along with methods for their preparation and use. Consensus immunoglobulin sequences and structural models are also provided.

**82 Claims, 9 Drawing Sheets**